Chapter 6:

Thoroughfare Plan

As a northern growth area of the Indianapolis Metropolitan Statistical Area, the Carmel-Clay Township area has developed with a high amount of alternative north-south routes into the historic core of the region, namely Indianapolis. Conversely east-west roadways are fairly limited across the township as the economic ties with areas to the east and west were historically much less important and the White River had to be crossed on the east border. North-south routes which traverse from one end of the township to the other include:

- Shelbourne
- Towne
- Ditch/Clay Center
- Spring Mill Rd.
- 31 (Meridian)
- Range Line Rd./Westfield Blvd.
- 431 (Keystone)
- Gray Rd.
- River Rd.

Continuous east-west roadways across the township are much fewer in number and include:

- 106th St.
- 116th St.
- 131st St.
- 146th St.



Figure 1 Historic Carmel/Clay Township North/South Roadway Classification

	Comprehensive			Primary	Secondary		
Roadway	Plan	Freeway	Expressway	Thoroughfare	Thoroughfare	Parkway	Collector
Hazeldell	1991					X	
(N. of 116th)	1985						X
	1971						X
Hazeldell	1991			X			
(S. of 116th)	1985				X		
	1971			Х			
Gray Rd.	1991				X		
(N. of 116th)	1985				X		
	1971						Х
Gray Rd.	1991				2.2	X	
(S. of 116th)	1985				X		
Keystone	1971						Х
	1991	X					
	1985	X					
5 II /	1971	X					
Rangeline/	1991			X X			
Westfield Blvd.	1985			, A			v
0-11	1971 1991				Х		Х
College Ave.	1985				X		
	1971				^		x
Meridian (US 31)	1991	Х					^
iweridian (05 51)	1985	X					
	1971	X					
Spring Mill	1991						х
	1985						X
	1971						
Ditch	1991						X
	1985						X
	1971						X
Towne	1991					Х	
	1985						X
	1971						X



Figure 2 Historic Carmel/ClayTownship East/West Roadway Classification

	Comprehensive			Primary	Secondary		
Roadway	Plan	Freeway	Expressway	Thoroughfare	Thoroughfare	Parkway	Collector
96th St.	1991					Х	
(E. of Rangeline)	1985						Х
	1971						X
96tn St.	1991				Х		
(W. of Rangeline)	1985						Х
	1971						X
106th St.	1991			Х			
(E. of Spring Mill)	1985				Х		
	1971			X			
106th St.	1991			Х			
(W. of Spring Mill)	1985				Х		
	1971			Х			
116th St.	1991				Х		
(W. of U.S. 31)	1985				X		
` ,	1971						X
116th St. (W. of Spring Mill)	1991				X X		
	1985				Х		
	1971						X
Carmel Dr.	1991					Χ	
(W. of Keystone)	1985				Х		
	1971						X
126th St.	1991			Х			
	1985			Х			
	1971			Х			
131st St.	1991			Х			
	1985			Х			
	1971						X
136th St.	1991				Х		1
	1985				X X		
	1971						X
146th St.	1991	Х					
	1985	Х					
Clay	19/1	X					

Review of Major Roadways

The City of Carmel and Clay Township are linked in a north/south fashion by three U.S. or state highways. These include; Michigan Road (U.S. 421), Meridian (U.S. 31) and Keystone (U.S. 431). These three roadways combine to carry over 110,000 vehicles per day across some portion of the township.

Michigan Road (U.S. 421)

Michigan Road provides accessibility to the far western edge of the township and is configured as a four lane non-divided highway. This roadway connects with an interchange onto I-465, the circumferential interstate highway around Indianapolis.

Meridian Street (U.S. 31)

U.S. 31 is a four to eight lane roadway linking Carmel to Westfield and Kokomo to the north, and Indianapolis to the south. U.S. 31 is a divided roadway as it passes through Clay Township. It also has a major multi-laned interchange access to I-465. Traffic volumes range from 35,000 (in the north) to 45,000 vehicles per day on this roadway. Access control is good on this roadway and is consistent with modern development standards to enhance the carrying capacity of the roadway.



As noted on Figure 3, traffic volumes between 1989 and 1993 (the latest published counts) have increased from 8% in the southern reaches of the township to over 22% in the northern segments. This increase parallels the northern urbanization of the township.

Keystone Avenue (U.S.431)

Keystone Avenue is a major state highway traversing through Clay Township. This roadway is controlled in its access and exists as a six-lane divided roadway from the southern edge of the township at 96th St. to north of 103rd. North of 103rd this roadway is four lane with an added turning lane at each of the bisecting east -west streets. Keystone in its southern connection at 96th Street carries

Figure 3
Estimated Daily Traffic Levels at Selected Locations
Comparison of Traffic Increases Between 1989 and 1993

	Estimated Daily Traffic						
Route	Section	1989		Vol Incr.	% Incr.		
U.S. 31	1-465 to 103rd St.	43,000	46,259	3,259	8%		
	111th St. to 116th St.	40,000	41,387	1,387	3%		
	116th St. to 131st St.	29,000	32,000	3,000	10%		
	131st St. to 136th St.	22,500	27,460	4,960	22%		
Keystone Ave	96th St. to 98th St.	37,000	49,357	12,357	33%		
	106th St. to 116th St.	32,500	38,659	6,159	19%		
	116th St. to Carmel Dr.	29,000	30,167	1,167	4%		
	126th St. to 131st St.	24,500	30,167	5,667	23%		
Range Line Rd	96th St. to 103rd St.	10,500	12,350	1,850	18%		
	Carmel Dr. to 126th St.	15,000	18,395	3,395	23%		
	131str St. to 136th St.	9,000	9,869	869	10%		
106th St.	Range Line Rd. to U.S. 31	11,000	7,612	-3,388	-31%		
116th St.	Gray Rd. to Keystone Ave.	14,000	18,364	4,364	31%		
	Keystone to Range Line	11,500	15,443	3,943	34%		
	Range Line Rd. to U.S.31	7,700	9,179	1,479	19%		
Carmel Dr	U.S. 31 to Guilford		6,400				
	Guilford to Rangeline		11,838				
	Rangeline to Keystone		17,065				

more traffic than any road segment in the township. It can be expected that in 1997, when the 96th St. bridge over White River is constructed, Keystone will carry additional traffic. The following figure is a map of the township and relates traffic volumes per segment of those roads which are designated as at least a collector on the Thoroughfare Plan.

While growth in Clay Township took on a residential character in the 1970's, the area has now emerged as a major employment center. Currently, the second largest concentration of office space is located in Clay Township



predominately located along the U.S. 31 corridor. Other emerging employment centers include College Park in northern Marion and southern Boone counties to the west of Clay Township and the Castleton/Fishers employment center to the east of the township. As the area's employment reliance on downtown Indianapolis shifts to these adjacent areas, the need for good east-west access will be magnified. This trend is adequately shown by the comparative traffic volumes table. As can be noted on this table, the segment which showed the highest increase in volumes was the east-west link of 116th St., between Keystone and the White River. This roadway link is currently being widened from two to three lanes. The emerging importance of east west links is further demonstrated in the review depicting how various roadways have been classified in the previous 1971,1985 and 1991 Thoroughfare Plans. What is very noticeable in this comparison is the frequency that east-west streets have been upgraded in their status on the Thoroughfare Plan. As can be noted, east-west roads which have had their status increased include; 96th, 116th, Carmel Dr. west of Keystone, 131st, and 136th. This upgrading reflects urbanization adjacent to Clay Township and the need to provide for east west access linkages.



CURRENT TRANSPORTATION ISSUES

In the context of the Comprehensive Plan, the Thoroughfare Plan is defined by a functional classification system (including number of lanes) for all roadways within the planning area and a corresponding set of geometric standards. Together, these elements provide sufficient information to guide future actions regarding the location, right-of-way, and design of public roadways.

In addition to functional classification and geometric standards, a Comprehensive Plan can address a range of other planning issues related to the future transportation system. The issues identified through the following summary points are those which were raised in the citizen involvement phase of the 2020 process.

East-West Continuity Across U.S. 31

U.S. 31 is the principle north-south roadway in the Indianapolis region. Through Clay Township it carries volumes ranging from 27,000 to 46,000. As residential growth in Hamilton County's Clay and Washington townships continues to boom, traffic volumes along U.S. 31 will continue to soar. Currently classified as a "Freeway" on the Carmel-Clay Thoroughfare Plan, this roadway is being studied by the state of Indiana for the purpose of adding capacity. Options receiving favorable backing so far in the process include making the roadway into a more limited highway with a character similar to an Interstate with interchanges. With the township already bifurcated into three areas by U.S. 31 and Keystone, citizens expressed considerable concern about the ability to traverse east-west, particularly across U.S. 31.



Adequate Road Capacity to Serve Emerging Community and Regional Employment Growth Areas

A fundamental concept of this Comprehensive Plan relates to the distinction of residential community areas, where people live and do their convenience shopping, and community/regional employment areas, which provide for the economic viability of the area. Consistently, in the 2020 Visioning Process, citizens expressed the value and acceptance of community/regional employment areas, if the traffic and other associated impacts were mitigated.

Pedestrian Facilities - Location and Standards

On multiple occasions, citizens expressed the desire for the expansion of sidewalks and trails to provide for non-motorized mobility. Hamilton County has recently become the first county in the state to develop and adopt an Alternative Transportation Mobility Plan and has identified many routes through Carmel and Clay Township as being shared bicycle lane or separated trails as part of a countywide system.

Each of the issues presented above was considered in the development of transportation recommendations presented in the following section.



THOROUGHFARE PLAN RECOMMENDATIONS

East-West Continuity Across U.S. 31 Recommendations

Consistent with the objectives voiced in the various citizen meetings and timely with the current analysis by the state of Indiana study of U.S. 31, the following recommendations are made.

- Encourage the State to develop interchanges off of U.S. 31 to serve the Community/Regional Employment Areas at 106th, 116th, Carmel Drive, 131stSt., 136stSt. and 146th St.
- Encourage the State to develop overpasses or underpasses of U.S. 31 to provide additional Residential Community Area east-west mobility at 111th, 131st and 136st Streets.

Recommendations to Ensure Adequate Road Capacity to Serve Emerging Community /Regional Employment Growth Areas

Again it must be noted that in the 2020 Visioning process, citizens were cautiously encouraging of the continued need to expand the commercial/industrial tax base through business growth if the negative impacts of that growth could be mitigated and contained. The following actions are recommended to deal with this objective:

• The 1991 Land Use and Thoroughfare Plan recognized the controlled growth potential of the community/regional employment area along the Meridian/U.S. 31 corridor. In order to accommodate anticipated growth and yet mitigate such traffic impacts on the adjacent residential community areas, two access roadways parallel to U.S. 31 were recommended. On the east, this parallel roadway involves the extension of Pennsylvania St. from 103rd to 131st. Similarly an access roadway, at roughly the same spacing, as



- Pennsylvania St., needs to be developed on the west side of U.S. 31 to provide business access and preserve the integrity of Spring Mill as a residential community area collector road.
- To enhance mobility within the Carmel Drive community/regional employment area, Carmel Drive should be upgraded to primary arterial status on the Thoroughfare Plan. Accordingly, access cuts onto Carmel Drive should be minimized or consolidated.
- As urbanization continues in the northern areas of Clay Township and southern Washington Township, eastwest access is going to continue to emerge as being critical. For this reason 146th Street should be upgraded to primary arterial status and the appropriate right-of-way secured at time of subdivision plat approval.

Overall Township Mobility Recommendations

As Clay Township approaches its buildout over the next twenty year period, and high growth rates continue to be exhibited in adjacent Washington Township and Fall Creek Township, planning to ensure adequate roadway capacity within Carmel and Clay Township must take place to accommodate an acceptable level of growth. Based on the proposed land use plan and the associated commensurate traffic in Clay Township as well as the adjacent townships, the following recommendations are made:

- To enhance east-west mobility in the western reaches of Clay Township, particularly to serve the long range Clay Township school facility at Towne and 126st, a new east-west roadway should be extended in a configuration between Carmel Drive at U.S. 31 and the school property.
- In order to discourage the further geographic bifurcation of Clay Township and traffic intrusion into the large, existing residential community area west of Spring Mill, alternatives being analyzed by the state of Indiana to



- designate Ditch or Spring Mill Road as an alternative U.S. 31 alignment should be strongly discouraged by the City of Carmel and Clay Township.
- Continuous north-south access should be enhanced in the eastern edge of the township through the construction of Hazeldell Road from 146th to 96th Streets. When completed this facility will provide the only continuous north-south access throughout the township, east of Keystone Avenue. To maintain the emerging high residential quality of this area, the roadway should be developed as a parkway.

Pedestrian Facilities Locations and Standards

Consistent with opinions expressed in the 2020 Visioning Process, an alternative transportation system of sidewalks and trails should be developed.

- The first priority in the development of this pedestrian system should be the construction of the Monon Trail. This facility has been recommended as the major north-south link of the Bicycle and Pedestrian System Plan for the Indianapolis Metropolitan Planning Area (an eight county region) and is a major link in the Hamilton County Alternative Transportation Plan.
- The Hamilton County Alternative Transportation Plan adopted in 1995 by the Hamilton County Commissioners recommends standards for the development of bicycling and pedestrian systems. These standards should be likewise adopted by the Carmel-Clay Township Plan Commission and incorporated into the Thoroughfare Plan.
- Route recommendations of the Hamilton County Alternative Transportation System Plan should be developed through Carmel and Clay Township.
- Carmel and Clay Township should make every effort to develop existing utility corridors into connecting trail linkages.

